

12-17-01

SECTOR B

IN THE UNITED STATES  
PATENT AND TRADEMARK OFFICE

Patent Application

Inventors(s): Federico Capasso  
Alfred Yi Cho  
Raffaele Colombelli  
Claire F. Gmachl  
Hock Min Ng  
Deborah Lee Sivco

Case: 68-107-2-21-3-37

Serial No.: 09/883,542 *AA*

Group Art Unit: Not Yet Assigned

Filing Date: June 18, 2001

Examiner: Not Yet Assigned

Title: Engineering the Gain/Loss Profile of Intersubband Optical Devices  
Having Heterogeneous Cascades

**RESPONSE TO NOTICE TO FILE MISSING PARTS  
AND NOTICE OF INCOMPLETE REPLY**

In further response to the Office action of August 15, 2001, as well as the Notice of Incomplete Reply dated November 7, 2001, Applicants herewith supply the following documents: (1) a copy of a **Formal Drawing** (6 sheets), (2) a **Petition to Extend Time for Response**, and (3) a copy of the **Notice of Incomplete Reply**. The following documents accompanied Applicants' previous response dated October 9, 2001: (4) an original of their **Declaration & Power of Attorney** in the above-identified application, and (5) a copy of the **Notice to File Missing Parts of Application**.

Authorization was previously given to charge the large entity missing parts fee of \$130.00 to **Deposit Account 12-2325** of Lucent Technologies Inc. In the event of any non-payment or improper payment of a required fee, the Commissioner is authorized to charge or credit the same account as required to correct the error.

Respectfully,

By *Michael J. Urbano*

Michael J. Urbano  
Attorney for Applicant(s)  
Reg. No. 24522  
610-691-7710

Date: 11/12/01

Express Mail No. EF 023 155 204 US

Date of Deposit 11/13/01

I hereby certify that this Response is being deposited with the U.S. Postal Service "Express Mail Post Office to Addressee" service under 37CFR1.10 on the date indicated above and is addressed to the Commissioner of Patents and Trademarks, Washington, DC.

Michael J. Urbano: *Michael J. Urbano*

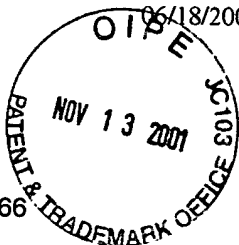


## UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS  
UNITED STATES PATENT AND TRADEMARK OFFICE  
WASHINGTON, D.C. 20231  
www.uspto.gov

APPLICATION NUMBER	FILING/RECEIPT DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NUMBER
09/883,542	06/18/2001	Federico Capasso	68-107-2-21-3-37

Michael J. Urbano  
1445 Princeton Drive  
Bethlehem, PA 18017-9166



CONFIRMATION NO. 1403

## FORMALITIES LETTER



\*OC00000007037532\*

Date Mailed: 11/07/2001

## NOTICE OF INCOMPLETE REPLY (NONPROVISIONAL)

*Filing Date Granted*

The U.S. Patent and Trademark Office has received your reply on 10/09/2001 to the Notice to File Missing Parts (Notice) mailed 08/15/2001 and it has been entered into the nonprovisional application. The reply, however, does not include the following items required in the Notice.

The period of reply remains as set forth in the Notice. You may, however, obtain EXTENSIONS OF TIME under the provisions of 37 CFR 1.136 (a) accompanied by the appropriate fee (37 CFR 1.17(a)).

A complete reply must be timely filed to prevent ABANDONMENT of the above-identified application.

The application is informal since it does not comply with the regulations for the reason(s) indicated below.

The required item(s) identified below must be timely submitted to avoid abandonment:

- Substitute drawings in compliance with 37 CFR 1.84 because:
  - drawing sheets do not have the appropriate margin(s) (see 37 CFR 1.84(g)). Each sheet must include a top margin of at least 2.5 cm. (1 inch), a left side margin of at least 2.5 cm. (1 inch), a right side margin of at least 1.5 cm. (5/8 inch), and a bottom margin of at least 1.0 cm. (3/8 inch);

*A copy of this notice **MUST** be returned with the reply.*

Customer Service Center  
Initial Patent Examination Division (703) 308-1202

PART 2 - COPY TO BE RETURNED WITH RESPONSE

12/12/2001 09:00:00 00000043 122325 09603542

12 FEB 2002 130.00 CH